

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough; and 2. added matter is shown by underlining.

1. (Presently Presented) An air supply system for supplying air to a fuel cell, wherein the fuel cell generates electric energy by an electrochemical reaction between a fuel gas and oxygen contained in the air, the air supply system comprising:

an air cleaner disposed on an upstream side of the fuel cell and having housing;

a filter element disposed within the housing of the air cleaner and arranged and constructed to remove dust particles from the air; and

a gas-removing device disposed within the housing of the air cleaner on the downstream side of the filter element and arranged and constructed to remove impurity gases from the air;

wherein the gas-removing device comprises:

activated carbon fibers having micropores formed therein in order to absorb impurity gas particles contained in the air, the micropores having inner walls; and

an alternate adsorption membrane formed on the inner walls of the micropores of each of the activated carbon fibers in order to further adsorb at least one type of impurity gas particles from among the impurity gas particles absorbed by the porous material, the alternate adsorption

membrane comprising at least one positively charged layer and at least one negatively charged layer alternately laid together.

2. (Currently Amended) The air supply system as in claim 1, wherein ~~the micropores of~~ the activated carbon fibers include those having micropores that are directly exposed to the outside of the activated carbon fibers.

3. (Cancelled).

4. (Previously Presented) The air supply system as in claim 1, wherein the activated carbon fibers are formed into a non-woven fabric.

5. (Previously Presented) The air supply system as in claim 4, wherein the gas removing device further includes resin fibers mixed with the activated carbon fibers to form the non-woven fabric.

6. (Previously Presented) The air supply system as in claim 4, wherein the gas removing device further includes resin fibers formed into at least two non-woven fabrics, and wherein the non-woven fabric of the activated carbon fibers is interleaved between the two non-woven fabrics.

7. (Cancelled).

8. (Cancelled).

9. (Previously Presented) The air supply system as in claim 1, further comprising a compressor disposed on a downstream side of the air cleaner and arranged and constructed to compress the air and to supply the compressed air to the fuel cell.

10. (Previously Presented) The air supply system as in claim 9,  
wherein a sound deadening space is defined in the housing of the air cleaner on the downstream side of the filter element; and

wherein the gas-removing device is disposed within the sound deadening space of the housing.

11. (Cancelled).

12. (Cancelled).

13. (Cancelled).

14. (Cancelled).